THE
ATMOSPHERIC RESERVOIR
Examining the Atmosphere and Atmospheric Resource Management

Cloud Modification Program upgrades

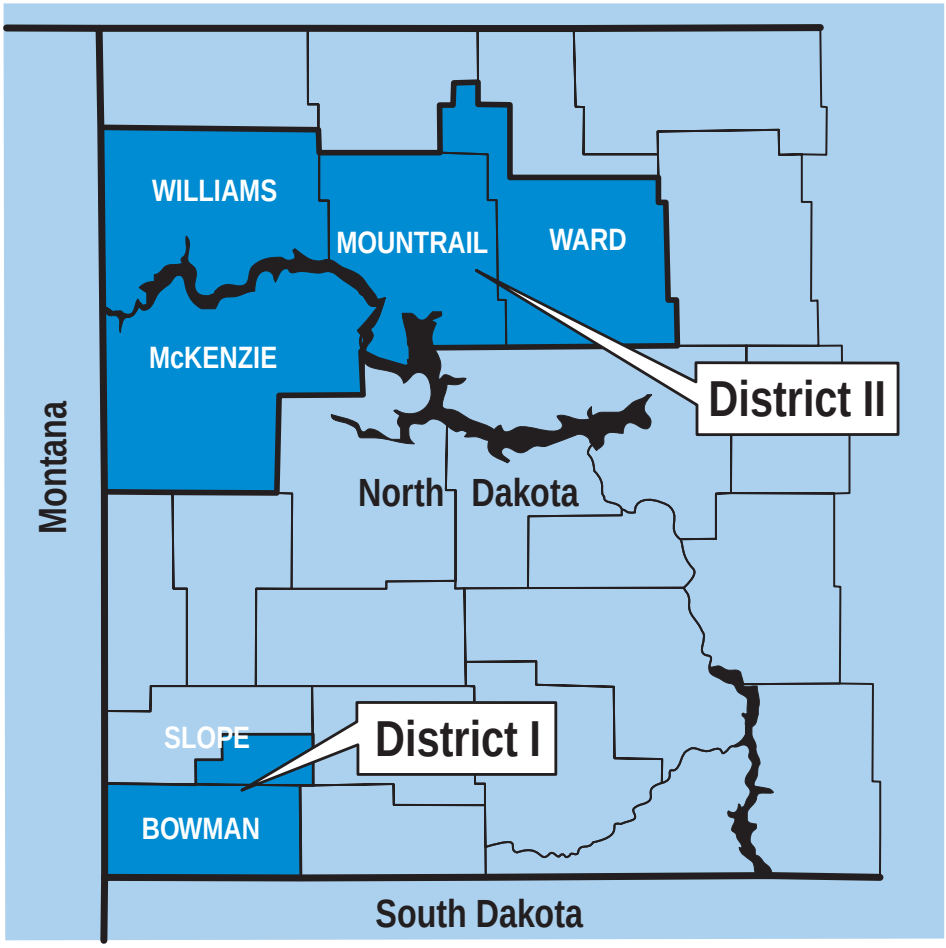
By Bruce Boe

The 2000 North Dakota Cloud Modification Program began at noon on June 1st in the participating western North Dakota target areas. This year's project, designed to decrease damaging hail and increase rainfall, includes McKenzie, Mountrail, Ward, and Williams counties in the northern target area, and Bowman County and nine Slope County townships in the southern target.

There are several notable changes in the 2000 project. The project radars, located at Bowman and Stanley, will now sample the entire sky 16 or 17 times an hour, instead of just ten times. The radar scans have been ported to the Internet for two years, but this year, new images will be posted more frequently, eight times per hour, or more. An animated loop of a series of radar images will also be posted for public access. To check out the project radar data, visit http://www.swc.state.nd.us/arb/html/radar.html.

All aircraft in the northern target area will be equipped with GPS position recording and telemetry equipment, and their positions (when airborne) will be relayed by radio and displayed in real-time on the Stanley radar Internet images. Though all six aircraft will be equipped, positions may not always show up when an aircraft is at long range from the radar and/or at low altitude.

In addition, the cloud top seeding aircraft based in Williston will be equipped with a cloud physics data system for six weeks during the project. The data system will measure and record the following parameters once each second: position, temperature, dew point (humidity), pressure, cloud liquid water content, cloud ice particle content, and up- and down-drafts. With these measurements, more will be learned about the precise nature of the clouds being treated, or considered for treatment. (Not all clouds are suitable for seeding; many are too dry, too icy, or too weak.)



The 2000 North Dakota Cloud Modification Project operations areas.

To learn more about the 2000 project and North Dakota growing season rainfall, visit the project on the Web at http://www.swc.state.nd.us/arb/. ■

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